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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/834,647	04/16/2001	Stephen Mc Robert	95-393	3683

20736 7590 05/14/2004

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EXAMINER	
DU, THUAN N	

ART UNIT	PAPER NUMBER
2116	9

DATE MAILED: 05/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/834,647	ROBERT ET AL.	
	Examiner	Art Unit	
	Thuan N. Du	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2,5*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: IDS (dated 6/6/01 and 11/8/02), Formal Drawings (dated 6/6/01).

2. Claims 1-15 are presented for examination.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 7 recites the limitation "the controller" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-5, 8-12 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No. 6,442,174)[1] in view of Poulter et al. [Poulter] (U.S. Patent No. 6,603,741).

8. Regarding claim 1, Lin teaches a method for saving power in a network system comprising the steps of:

receiving a request requiring operating a physical layer transceiver according to a low-power operation, the physical layer transceiver configured for operating at a selected data rate, from one of a high-speed data rate and a low data rate, according to an autonegotiation routine [col. 3, line 66 to col. 4, line 12]; and

resetting the selected data rate to the low data rate and restarting the autonegotiation for the low data rate in response to the request [col. 4, lines 57-60; col. 5, lines 29-42].

Lin does not explicitly teach the responding step for responding to the request based on a determined result of the autonegotiation.

Poulter teaches a method for monitoring autonegotiation process comprising the step of acknowledging based on a determined result of the autonegotiation [col. 4, lines 46-52].

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaching of Lin to include the acknowledgment taught by Poulter because they both teach a method for selecting operating data rate using autonegotiation process. The modification would increase the reliability of the system by allowing the autonegotiation process could be monitored to indicate the compatibility of the system in the network.

9. Regarding claims 2, 3 and 5, Poulter teaches

[1] U.S. Patent No. 6,442,174 was submitted by applicant on 11/08/02.

an autonegotiation advertisement register is used for specifying the operating data rate [col. 5, lines 22-23, 31-32]; and

a media independent interface (MII) management control register is used for specifying restarting the autonegotiation process [col. 5, lines 22, 25-27].

One of ordinary skill in the art would have readily recognized that it would have been obvious to change the values of the registers taught by Poulter for resetting the operating data rate and restarting the autonegotiation process.

10. Regarding claim 4, Poulter teaches an autonegotiation link partner ability register for storing configuration information for a link partner in communication with the physical layer transceiver [col. 5, lines 23-24, 32-34]. One of ordinary skill in the art would have readily recognized that it would have been obvious to access to the autonegotiation link partner ability register to determine the selected operating data rate of the link partner.

11. Regarding claim 8, both Lin and Poulter teach the low data rate corresponds to a 10 Mbps data rate according to IEEE 802.3 [Lin, col. 4, lines 7-9; Poulter, col. 4, lines 21-23, 28].

12. Regarding claims 9-12 and 14, Lin and Poulter together teach the claimed method steps. Therefore, Lin and Poulter together teach the apparatus to implement the claimed method steps.

13. Claims 6, 7, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (U.S. Patent No. 6,442,174) in view of Poulter et al. [Poulter] (U.S. Patent No. 6,603,741) and further in view of Hurwitz (U.S. Patent No. 5,884,041).

14. Regarding claim 6, Poulter teaches that the registers (14) are included in physical layer (PHY) [Fig. 2]. Poulter does not explicitly teach a serial management data input/output path connected to the PHY for accessing the registers.

Hurwitz teaches a MAC controller connected to a PHY via a serial data input/output path (the connection between the MAC and the PHY) for controlling the PHY [Fig. 2].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Lin-Poulter and Hurwitz because they both teach a method for selecting operating data rate using autonegotiation process. Hurwitz's teaching of the serial data input/output path connected between the MAC control and the PHY would increase the flexibility of Lin-Poulter's system by allowing the registers within the PHY could be accessed from the outside.

15. Regarding claim 7, Lin teaches an executable driver resource (software) configured for controlling the physical layer transceiver, performing the detecting and switching between protocols [col. 4, line 42 et seq.].

Poulter teaches a parallel detection is indicated by one of a plurality of bits within an autonegotiation expansion register [col. 5, lines 39-41].

However, both Lin and Poulter do not explicitly identifying failure of the request based on detecting use of the parallel detection.

Hurwitz teaches that a failure is identify based on detecting use of the parallel detection [col. 3, lines 29-34; col. 4, lines 59-64].

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Lin-Poulter and Hurwitz because they both teach a method for selecting operating data rate using autonegotiation process. Hurwitz's teaching of identifying a failure based on detecting use of the parallel detection would increase the reliability of the system by preventing the system to switch to a selected mode if not possible.

16. Regarding claims 13 and 15, Lin, Poulter and Hurwitz together teach the claimed method steps. Therefore, Lin, Poulter and Hurwitz together teach the apparatus to implement the claimed method steps.

Conclusion

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (703) 308-6292. The examiner can normally be reached on Monday-Friday: 9:00 AM - 5:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H. Browne can be reached on (703) 308-1159.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

The fax number for the organization is (703) 872-9306.

LYNNE H. BROWNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER ~~3600~~ 2100

Thuan N. Du
May 5, 2004